

# Work Order ID 93089

November-14-12 1:42:32 PM

\*93089\*

Page 1

Item ID: D4694-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Channel

Start Date: 14/11/2012 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 05/12/2012 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan:

MCS

Date: 12-11-15

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr                            |                      |         |        |              |               |               |                  |                |
| D4694                          | A                                       |                      |         |        |              |               |               |                  |                |
| 100                            | FLOW WATER JET                          | 0.00                 |         |        |              |               |               |                  |                |
| *100*                          |   |                      |         |        |              |               |               |                  |                |
| Waterjet                       | Memo                                    | 0.00                 |         |        |              |               |               |                  |                |
| FLOW CNC Waterjet              | 1-Cut as per Dwg                        |                      |         |        |              |               |               |                  |                |
| 60001.040                      | Dwg Rev: A                              |                      |         |        |              |               |               |                  |                |
|                                | Prog Rev: A                             |                      |         |        |              |               |               |                  |                |
|                                | 2-Deburr if necessary                   |                      |         |        |              |               |               |                  |                |
| 110                            | QC2- Inspect parts off machine FAI/FAIB | 0.00                 |         |        |              |               |               |                  |                |
| *110*                          |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                    | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |
| 120                            | QC8- Inspect parts - second check       | 0.00                 |         |        |              |               |               |                  |                |
| *120*                          |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                    | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

(2)

12-12-15

(2)

12-12-15

(2)

12-12-17

(DAS)  
09  
9-89

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped.             | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Work Order ID 93089

\*93089\*

Page 2

November-14-12 1:42:32 PM

Item ID: D4694-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Channel

Stop \*NS2\*

Start Date: 14/11/2012 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 05/12/2012 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Bend as per dwg  
NC BRAKE

0.00

\*130\*

Brake NC

Memo

0.00

Brake NC

BEND AS PER DWG

C'SINK AS PER DWG

150

QC5- Inspect part completeness to step on W/O

0.00

\*150\*

QC

Memo

0.00

Quality Control

160

Chemical Conversion Coat per QS1005 4.1

0.00

\*160\*

HandFinish

Memo

0.00

Hand Finishing

12/12/21  
12/10/03

B-23

2

2

269 B-1-7

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Work Order ID 93089

\*93089\*

Page 3

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Item ID: D4694-3 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Channel  
 Start Date: 14/11/2012 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 05/12/2012 Req'd Qty: 2.00 \*2\* Customer:  
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

|       |                                      |      |  |  |  |  |  |  |  |
|-------|--------------------------------------|------|--|--|--|--|--|--|--|
| 180   | QC7-Inspect Chemical Conversion Coat | 0.00 |  |  |  |  |  |  |  |
| *180* |                                      |      |  |  |  |  |  |  |  |
| QC    | Memo                                 | 0.00 |  |  |  |  |  |  |  |

Quality Control

|           |  |      |  |  |  |  |  |  |  |
|-----------|--|------|--|--|--|--|--|--|--|
| 190       | Identify as per dwg & Stock Location: <u>Therm</u> | 0.00 |  |  |  |  |  |  |  |
| *190*     |  |      |  |  |  |  |  |  |  |
| Packaging | Memo   | 0.00 |  |  |  |  |  |  |  |

Packaging

|       |   |      |  |  |  |  |  |  |  |
|-------|---|------|--|--|--|--|--|--|--|
| 200   | QC21- Final Inspection - Work Order Release | 0.00 |  |  |  |  |  |  |  |
| *200* |   |      |  |  |  |  |  |  |  |
| QC    | Memo  | 0.00 |  |  |  |  |  |  |  |

Quality Control

2x

SD  
13-01-18

13/01/22

13-01-18

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>   | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>   | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>  |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 |  |   |
|---|---|--|---|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           | <input type="checkbox"/> Ovalized             |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        | <input type="checkbox"/> Over/Under tolerance |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           | <input type="checkbox"/> Part Incorrect       |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Part Lost/Missing    |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     | <input type="checkbox"/> Part Moved           |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      | <input type="checkbox"/> Positioned Wrong     |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         | <input type="checkbox"/> Power Loss/Surge     |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          | <input type="checkbox"/> Pressure/Forced      |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              | <input type="checkbox"/> Temperature/Cure     |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 | <input type="checkbox"/> Weld                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              | <input type="checkbox"/> Wrong Stock Pulled   |
|   |   |  | <input type="checkbox"/> Other                |

# Picklist Print

November-14-12 1:42:36 PM

Page 1  
T

Work Order ID: 93089

\*93089\*

Parent Item: D4694-3

\*D4694-3\*

Parent Item Name: Channel

Start Date: 14/11/2012

Required Date: 05/12/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 12-08-01 JLM VERIED BY:DD IPP  
REV:B 12.11.08 AS PER DWG REV:A DD VERF:JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M6061T6S.040                    |                        | Purchased     |             | No                  |                  | 100             | sf                 | 156.6578       | 0.4         | 0.842105     |               |                |        |
|                                 |                        |               |             |                     |                  |                 |                    |                |             | **           |               |                |        |
|                                 |                        |               |             |                     |                  |                 |                    |                |             |              |               | 12-12-15       |        |

\*M6061T6S 040\*  
6061-T6 .040 Sheet

Location

Loc Qty

Loc Code

MAT021

156.6578

121099

156.6578

123874  
~~93784~~ (2)

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

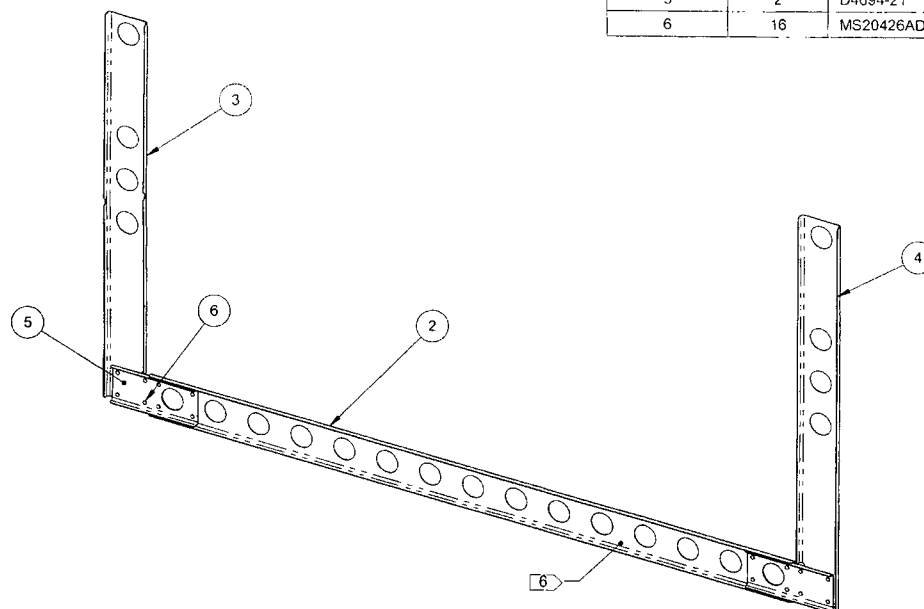
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
|--|-------------|-------------|---|---|--------------------------|---|------------------------|---------------------|--|--|---|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____   |             |             |   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                        |                     |  |  |   |  |
| <b>Root Cause</b>  | <b>Date</b> | <b>Step</b> | <b>Qty</b>  | <b>Description of work order update or Non-conformance</b>  | <b>Initial Chief Eng</b> | <b>Action Description</b>   | <b>Sign &amp; Date</b> | <b>Verification</b> | <b>QC Inspector</b>  |  |   |  |
| Doc/Data <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Equip/Tooling <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Operator <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Material <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Setup <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Other <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Process <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Supplier <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Training <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Unapproved <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| <b>FAULT CATEGORY</b>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped.<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |             |             | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                          | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                        |                     | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |  |





| ITEM NO. | QTY.<br>-041 | PART NUMBER  | DESCRIPTION          |
|----------|--------------|--------------|----------------------|
| 1        | X            | D4694-041    | FWD CHANNEL ASSEMBLY |
| 2        | 1            | D4694-1      | CHANNEL              |
| 3        | 1            | D4694-3      | CHANNEL              |
| 4        | 1            | D4694-5      | CHANNEL              |
| 5        | 2            | D4694-21     | BRACE CHANNEL        |
| 6        | 16           | MS20426AD4-3 | RIVET                |



SHOP DRAWING  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED  
 SUBJECT TO APPROVAL  
 WITHOUT NOTICE  
 WORK ORDER NO. **93089 MCT**  
 12-11-15

RELEASED  
 2012-11-01  
 [Signature]

**D4694-041 FWD CHANNEL ASSEMBLY**

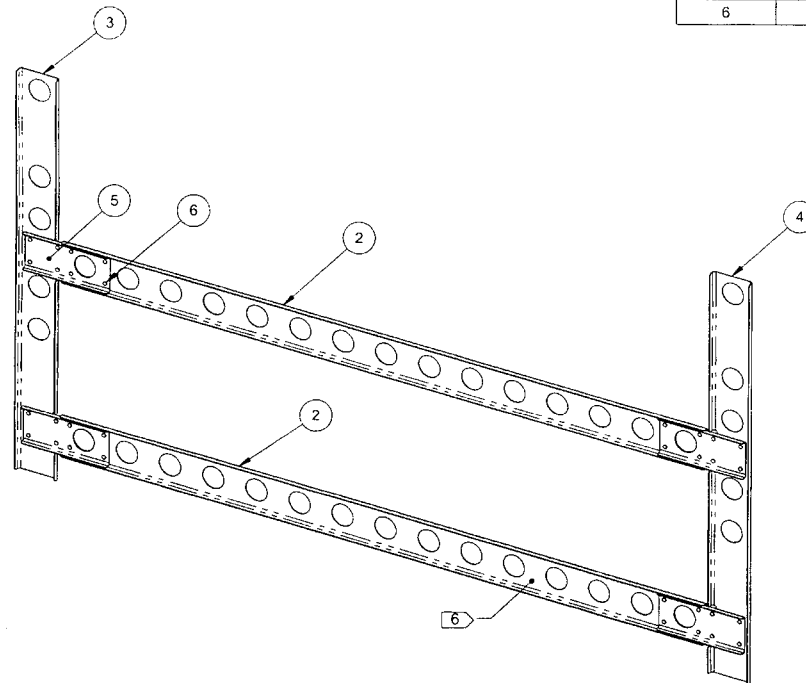
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.92 lbs

|            |             |   |               |
|------------|-------------|---|---------------|
| A          | NEW ISSUE   | RF  | 12.07.25      |
| REV.       | DESCRIPTION | BY  | DATE          |
| DESIGN     | RF          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |               |
| DRAWN      | RF          |   |               |
| CHECKED    | [Signature] | DRAWING NO.   | REV. A        |
| MFG. APPR. | [Signature] | D4694   | SHEET 1 OF 13 |
| APPROVED   | [Signature] | TITLE   | SCALE         |
| DE APPR.   | [Signature] | CHANNEL ASSEMBLY  | NTS           |
| DATE       | 12.07.25    | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br>WRITTEN PERMISSION FROM DART AEROSPACE LTD |               |

93089

| ITEM NO. | QTY.<br>-043 | PART NUMBER  | DESCRIPTION             |
|----------|--------------|--------------|-------------------------|
| 1        | X            | D4694-043    | MIDDLE CHANNEL ASSEMBLY |
| 2        | 2            | D4694-1      | CHANNEL                 |
| 3        | 1            | D4694-9      | CHANNEL                 |
| 4        | 1            | D4694-10     | CHANNEL                 |
| 5        | 4            | D4694-21     | BRACE CHANNEL           |
| 6        | 32           | MS20426AD4-3 | RIVET                   |

**D4694-043 MIDDLE CHANNEL ASSEMBLY****NOTES:**

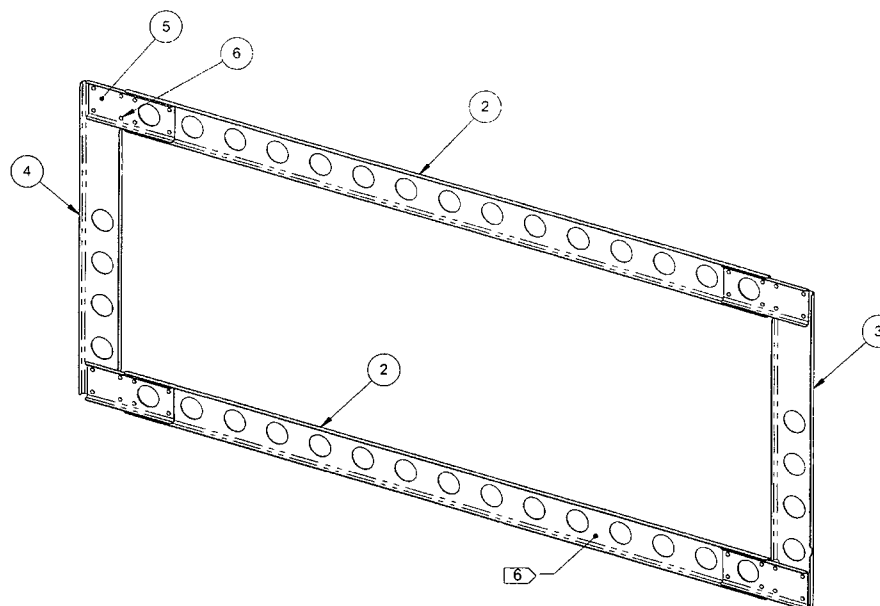
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.38 lbs

**RELEASED**  
 2012-11-01  
 MND

|            |                    |  |               |
|------------|--------------------|--|---------------|
| DESIGN     | RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | <b>D4694</b>   | SHEET 2 OF 13 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | <b>CHANNEL ASSEMBLY</b>  | NTS           |
| DATE       | 12.07.25           | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS<br>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br>WRITTEN PERMISSION FROM DART AEROSPACE LTD. |               |

93089

| ITEM NO. | QTY.<br>-045 | PART NUMBER  | DESCRIPTION          |
|----------|--------------|--------------|----------------------|
| 1        | X            | D4694-045    | AFT CHANNEL ASSEMBLY |
| 2        | 2            | D4694-1      | CHANNEL              |
| 3        | 1            | D4694-11     | CHANNEL              |
| 4        | 1            | D4694-13     | CHANNEL              |
| 5        | 4            | D4694-21     | BRACE CHANNEL        |
| 6        | 32           | MS20426AD4-3 | RIVET                |



**D4694-045 AFT CHANNEL ASSEMBLY**

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2012-11-05

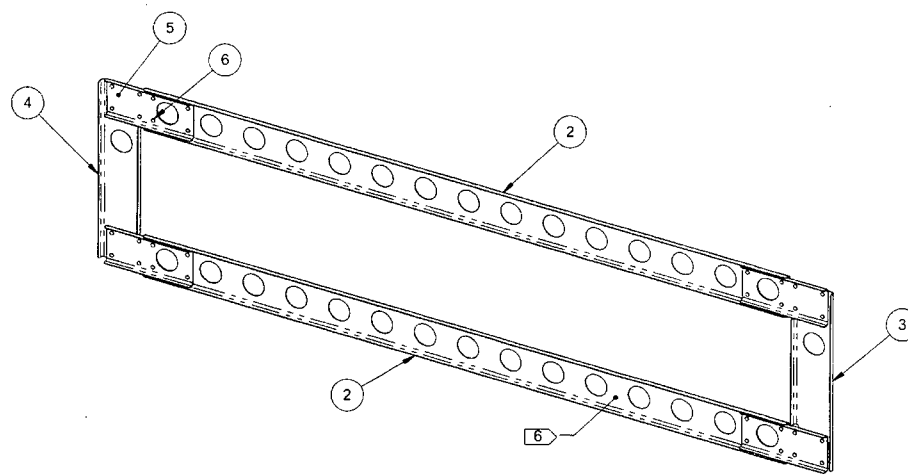
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.28 lbs

|            |          |  |               |
|------------|----------|--|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF       |  |               |
| CHECKED    | RF       | DRAWING NO.  | REV. A        |
| MFG. APPR. | RF       | D4694  | SHEET 3 OF 13 |
| APPROVED   | RF       | TITLE  | SCALE         |
| DE APPR.   | RF       | CHANNEL ASSEMBLY   | NTS           |
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| ITEM NO. | QTY.<br>-047 | PART NUMBER  | DESCRIPTION          |
|----------|--------------|--------------|----------------------|
| 1        | X            | D4694-047    | AFT CHANNEL ASSEMBLY |
| 2        | 2            | D4694-1      | CHANNEL              |
| 3        | 1            | D4694-15     | CHANNEL              |
| 4        | 1            | D4694-16     | CHANNEL              |
| 5        | 4            | D4694-21     | BRACE CHANNEL        |
| 6        | 32           | MS20426AD4-3 | RIVET                |



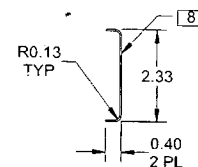
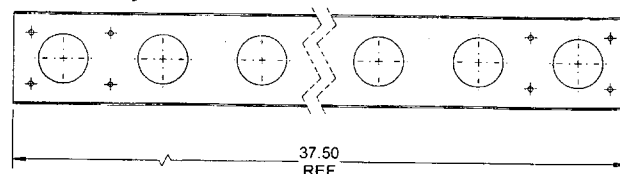
D4694-047 AFT CHANNEL ASSEMBLY

RELEASED  
2012-11-05  
NW

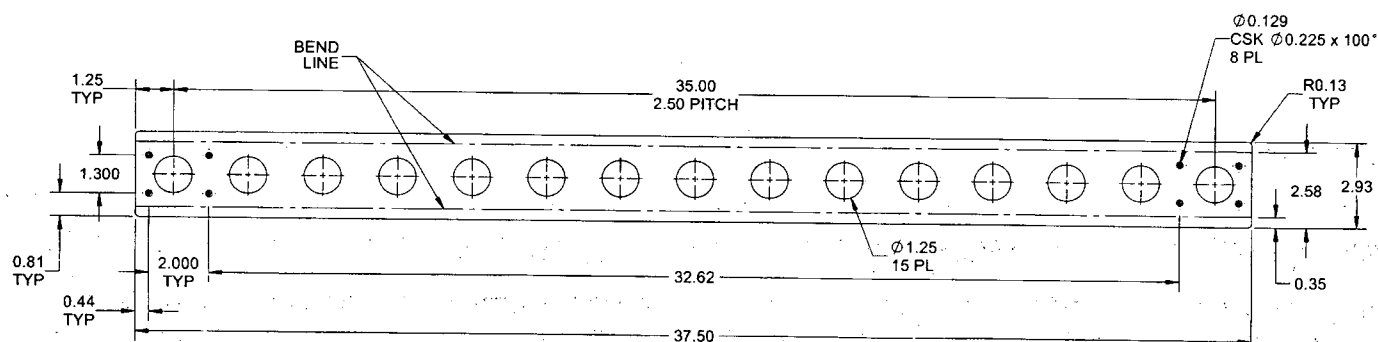
- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
  - 7) WEIGHT: 1.13 lbs

|            |                    |  |               |
|------------|--------------------|--|---------------|
| DESIGN     | RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | D4694  | SHEET 4 OF 13 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | CHANNEL ASSEMBLY   | NTS           |
| DATE       | 12.07.25           | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br>WRITTEN PERMISSION FROM DART AEROSPACE LTD. |               |

93089



**D4694-1 CHANNEL**  
(MAKE FROM D4694-1F FLAT PATTERN)



**D4694-1F FLAT PATTERN CHANNEL**

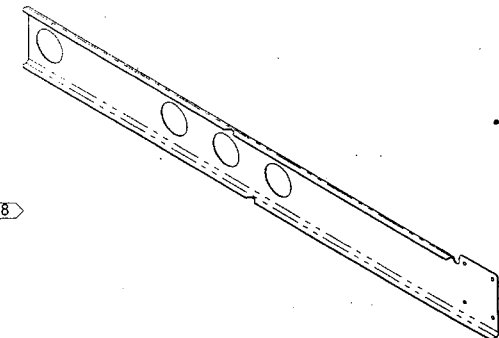
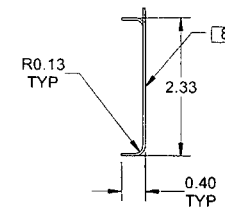
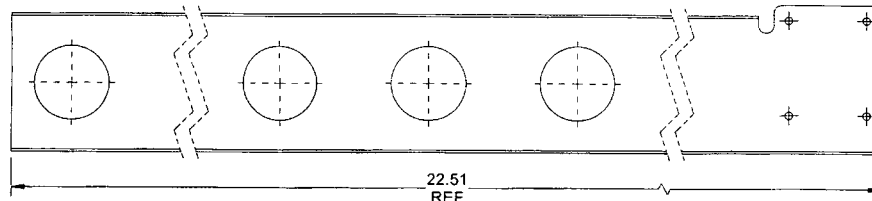
**RELEASED**  
2012-11-05

**NOTES:**

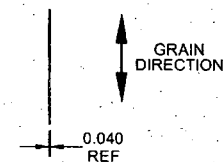
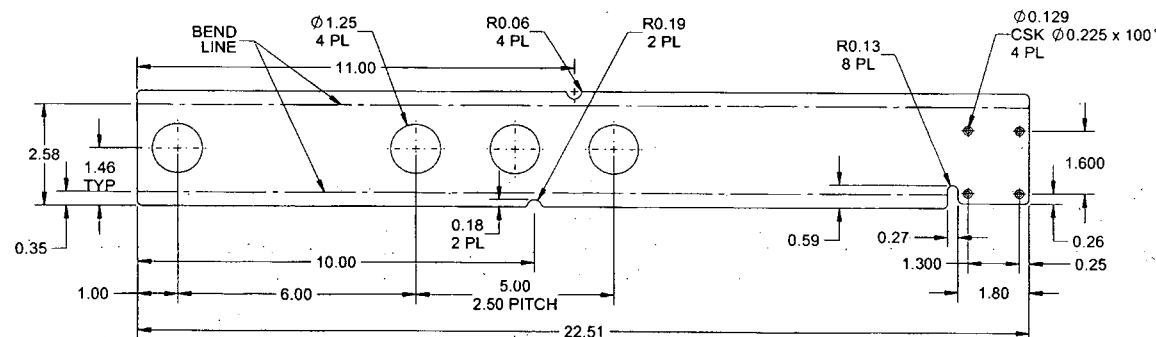
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.36 lbs
- 8) CSK Ø0.225 x 100° ON THIS SIDE

|            |                    |  |               |
|------------|--------------------|--|---------------|
| DESIGN     | RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | <b>D4694</b>   | SHEET 5 OF 13 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | <b>CHANNEL ASSEMBLY</b>  | NTS           |
| DATE       | 12.07.25           | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br><small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small> |               |

93089



**D4694-3 CHANNEL**  
(MAKE FROM D4694-3F FLAT PATTERN)



**D4694-3F FLAT PATTERN CHANNEL**

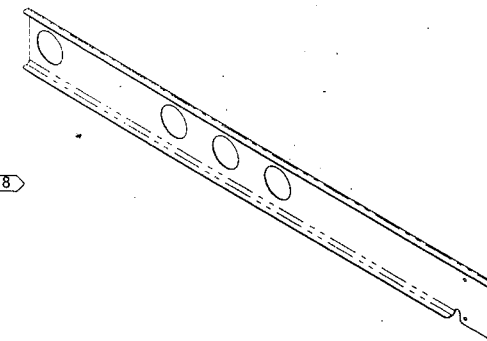
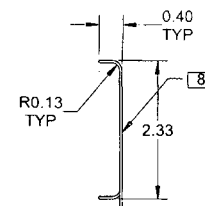
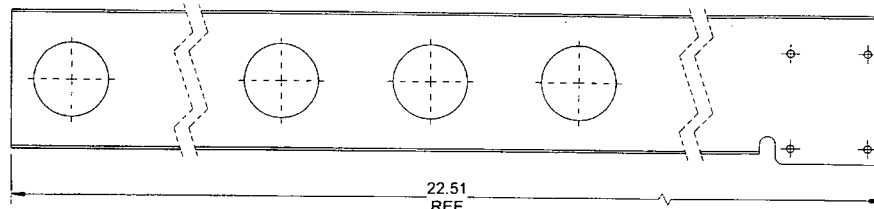
**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.24 lbs
- 8) CSK Ø 0.225 x 100° ON THIS SIDE

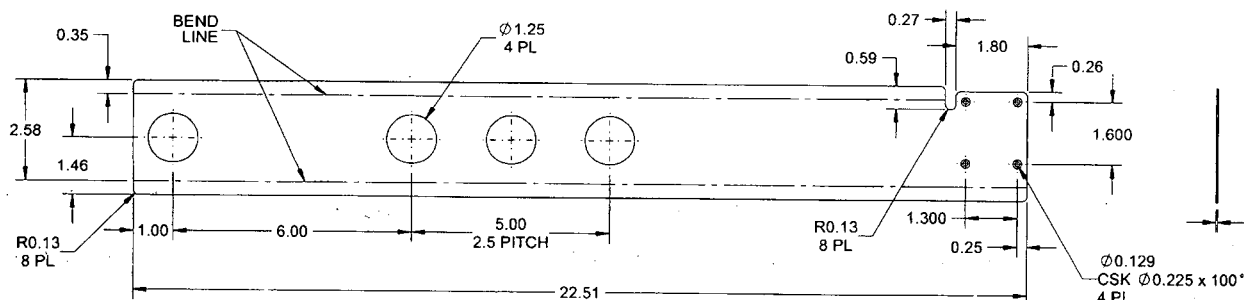
**RELEASED**  
R 2012 -11- 05

|            |                    |  |               |
|------------|--------------------|--|---------------|
| DESIGN     | RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | <b>D4694</b>   | SHEET 6 OF 13 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | <b>CHANNEL ASSEMBLY</b>  | NTS           |
| DATE       | 12.07.25           | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br>NOT TO BE USED FOR ANY PURPOSE OR OWNED OR TRANSMITTED TO ANY OTHER PERSON WITHOUT<br>WRITTEN PERMISSION FROM DART AEROSPACE LTD. |               |

93089



**D4694-5 CHANNEL**  
(MAKE FROM D4694-5F FLAT PATTERN)



GRAIN  
DIRECTION

**D4694-5F FLAT PATTERN CHANNEL**

RELEASED  
2012-11-05

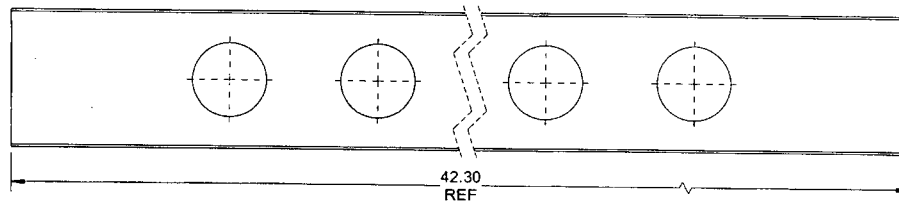
**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.24 lbs
- 8) CSK Ø0.225 x 100° ON THIS SIDE

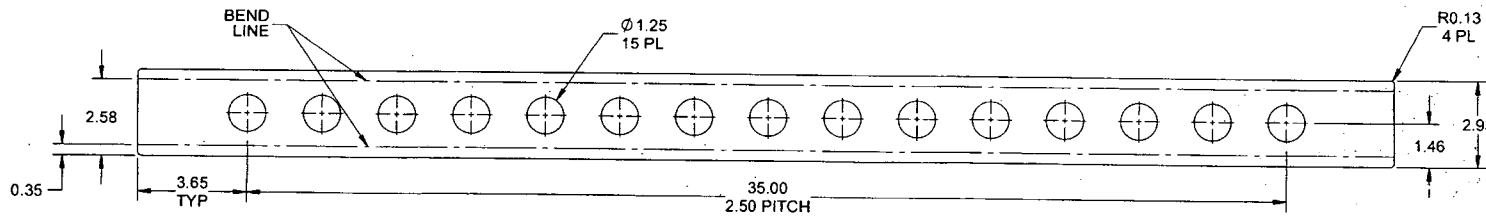
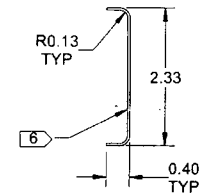
|            |          |   |               |
|------------|----------|---|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |               |
| DRAWN      | RF       |   |               |
| CHECKED    | RF       | DRAWING NO.   | REV. A        |
| MFG. APPR. | RF       | <b>D4694</b>  | SHEET 7 OF 13 |
| APPROVED   | RF       | TITLE   | SCALE         |
| DE APPR.   | RF       | <b>CHANNEL ASSEMBLY</b>   | NTS           |
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93089



**D4694-7 MIDDLE CHANNEL**  
(MAKE FROM D4694-7F FLAT PATTERN)



**D4694-7F FLAT PATTERN MIDDLE CHANNEL**

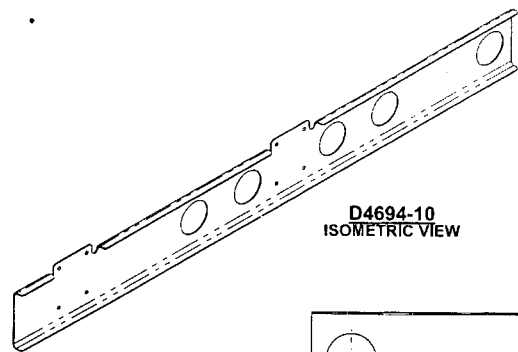
**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.41 lbs

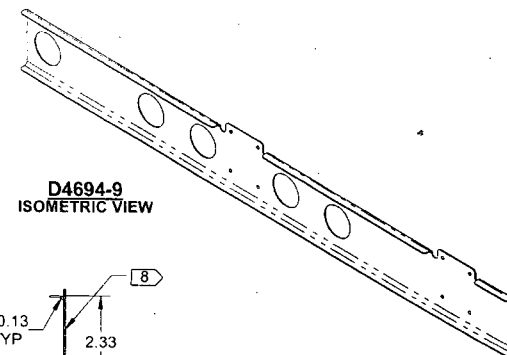
RELEASED  
2012-11-05  
JNP

|            |          |  |               |
|------------|----------|--|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF       |  |               |
| CHECKED    | RF       | DRAWING NO. <b>D4694</b>   | REV. A        |
| MFG. APPR. | RF       |  | SHEET 8 OF 13 |
| APPROVED   | RF       | TITLE <b>CHANNEL ASSEMBLY</b>  | SCALE         |
| DE APPR.   | RF       |  | NTS           |
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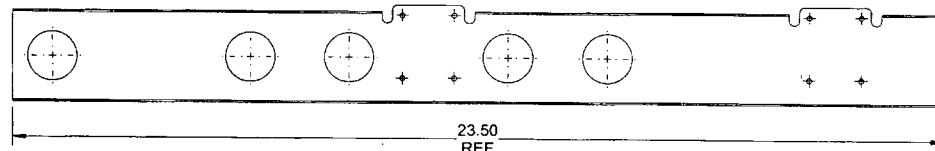
93089



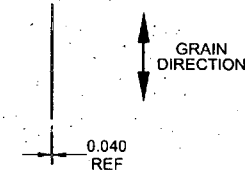
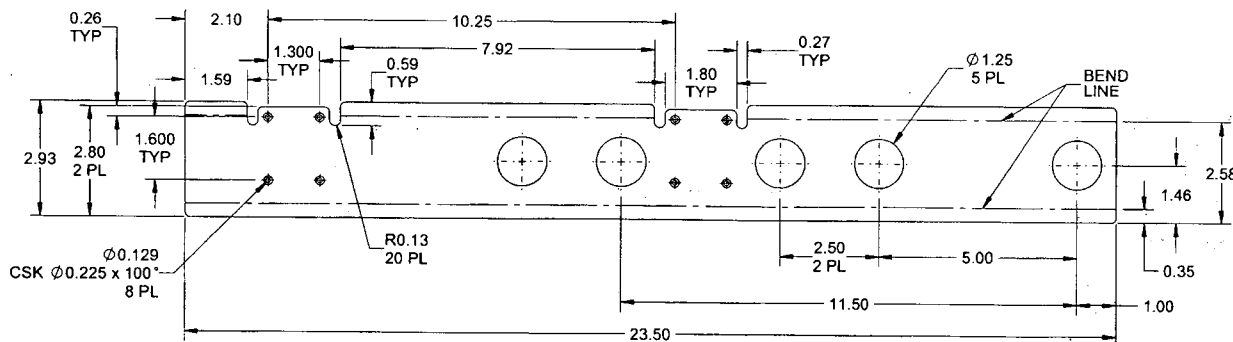
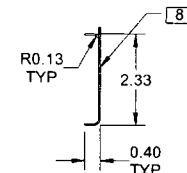
**D4694-10  
ISOMETRIC VIEW**



**D4694-9  
ISOMETRIC VIEW**



**D4694-9 CHANNEL, SHOWN  
D4694-10 OPPOSITE  
(MAKE FROM D4694-9F FLAT PATTERN)**



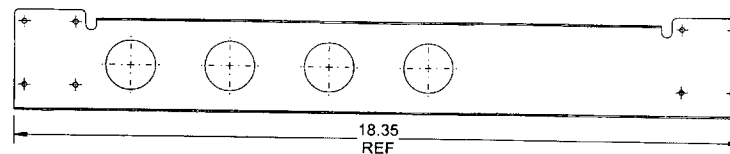
**D4694-9F FLAT PATTERN CHANNEL**

**NOTES:**

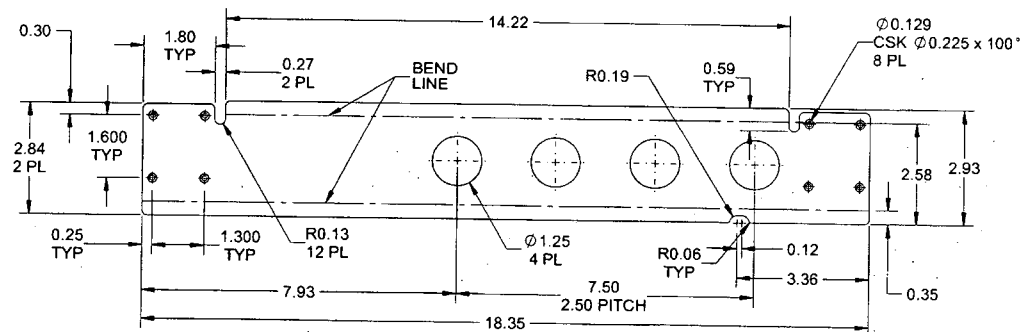
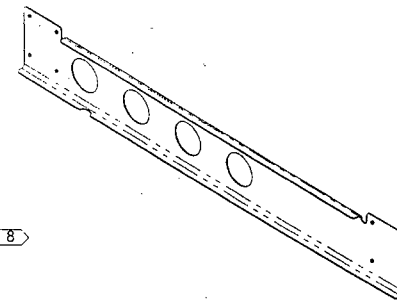
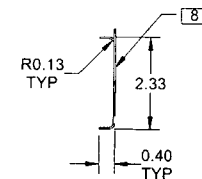
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.24 lbs
- 8) CSK  $\phi 0.225 \times 100^\circ$  ON THIS SIDE

|            |          |  |               |
|------------|----------|--|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |               |
| DRAWN      | RF       |  |               |
| CHECKED    | RF       | DRAWING NO.  | REV. A        |
| MFG. APPR. | RF       | <b>D4694</b>   | SHEET 9 OF 13 |
| APPROVED   | RF       | TITLE  | SCALE         |
| DE APPR.   | RF       | <b>CHANNEL ASSEMBLY</b>  | NTS           |
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**D4694-11 CHANNEL**  
(MAKE FROM D4694-11F FLAT PATTERN)



GRAIN DIRECTION

**D4694-11F FLAT PATTERN CHANNEL**

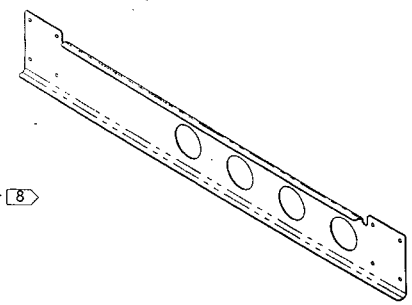
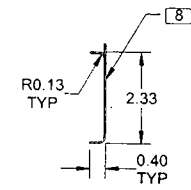
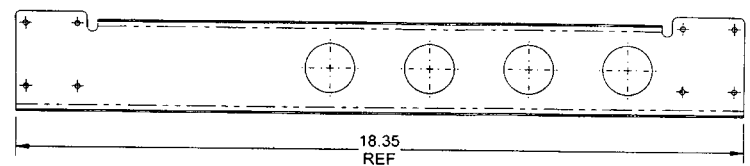
RELEASED  
2012-11-05

**NOTES:**

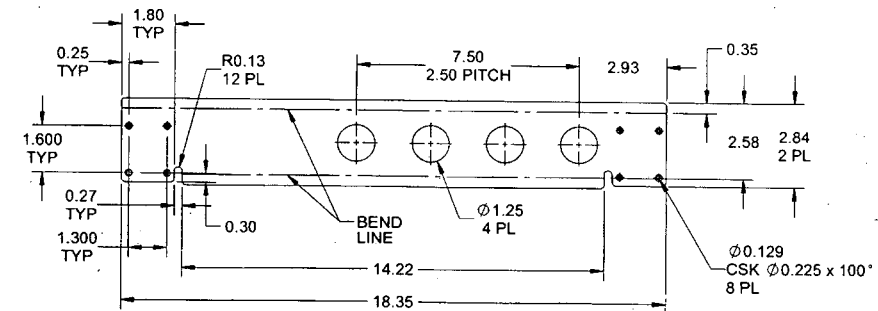
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.19 lbs
- 8) CSK  $\varnothing 0.225 \times 100^\circ$  ON THIS SIDE

|            |          |  |                |
|------------|----------|--|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |                |
| DRAWN      | RF       |  |                |
| CHECKED    | RF       | DRAWING NO. <b>D4694</b>   | REV. A         |
| MFG. APPR. | RF       |  | SHEET 10 OF 13 |
| APPROVED   | RF       | TITLE <b>CHANNEL ASSEMBLY</b>  | SCALE NTS      |
| DE APPR.   | RF       |  |                |
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**D4694-13 CHANNEL**  
(MAKE FROM D4694-13F FLAT PATTERN)



GRAIN  
DIRECTION

**D4694-13F FLAT PATTERN CHANNEL**

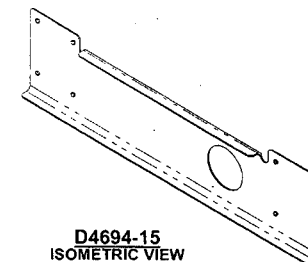
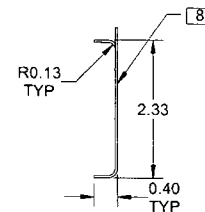
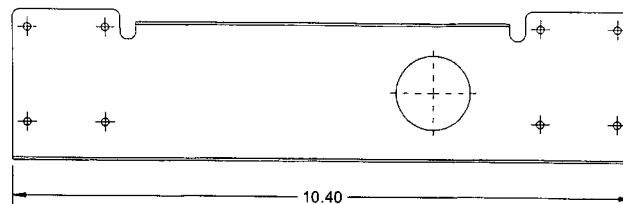
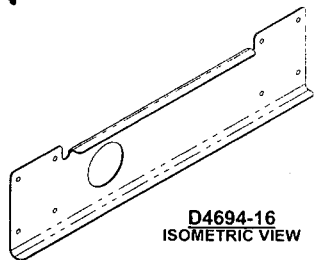
**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.19 lbs
- 8) CSK  $\phi 0.225 \times 100^\circ$  ON THIS SIDE

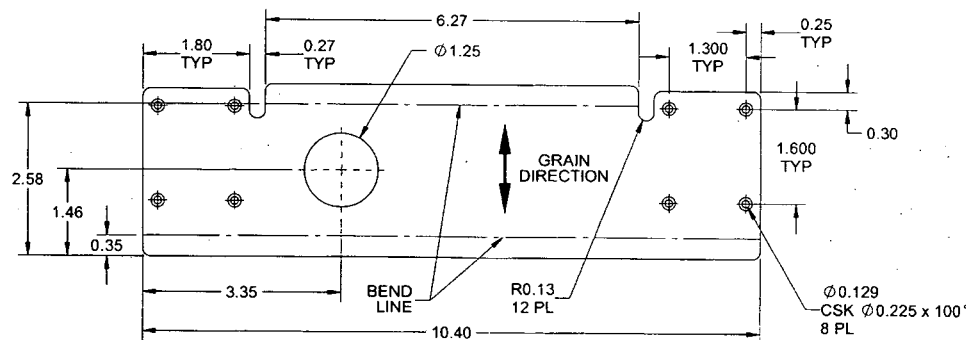
RELEASED  
2012-11-05

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|------------|----------|---|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |                |
| DRAWN      | RF       |   |                |
| CHECKED    | RF       | DRAWING NO.   | REV. A         |
| MFG. APPR. | RF       | <b>D4694</b>  | SHEET 11 OF 13 |
| APPROVED   | RF       | TITLE   | SCALE          |
| DE APPR.   | RF       | <b>CHANNEL ASSEMBLY</b>   | NTS            |
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**D4694-15 CHANNEL, SHOWN  
D4694-16 OPPOSITE  
(MAKE FROM D4694-15F FLAT PATTERN)**



**D4694-15F FLAT PATTERN CHANNEL**

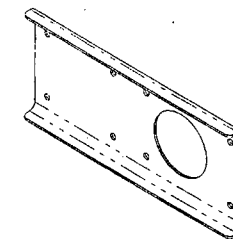
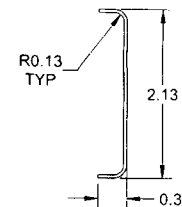
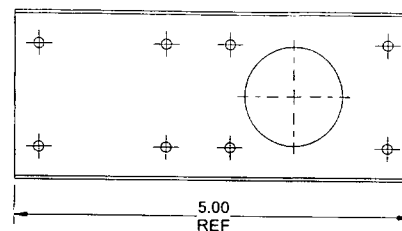
**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 G.1
- 7) WEIGHT: 0.11 lbs
- 8) CSK Ø0.225 x 100° ON THIS SIDE

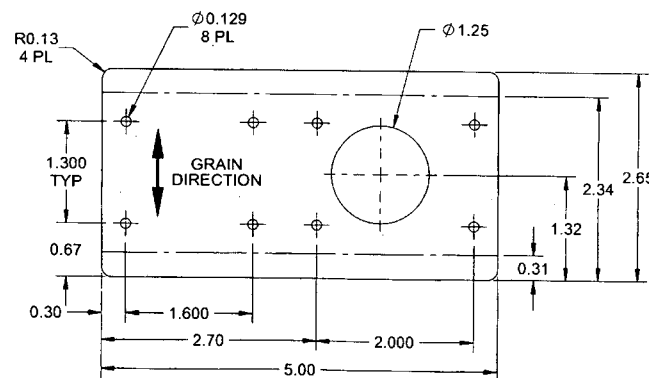
RELEASED  
2012-11-05

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|------------|----------|---|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |                |
| DRAWN      | RF       |   |                |
| CHECKED    | RF       | DRAWING NO.   | REV. A         |
| MFG. APPR. | RF       | <b>D4694</b>  | SHEET 12 OF 13 |
| APPROVED   | RF       | TITLE   | SCALE          |
| DE APPR.   | RF       | <b>CHANNEL ASSEMBLY</b>   | NTS            |
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**D4694-21 BRACE CHANNEL**  
(MAKE FROM D4694-21F FLAT PATTERN)



**D4694-21F FLAT PATTERN BRACE CHANNEL**

RELEASED  
2012-11-05

**NOTES:**

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK  
PER QQ-A-250/11 OR AMS-QQ-A-250/11  
OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC M6061T6S.040
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.05 lbs
- 8) CSK  $\phi 0.225 \times 100^\circ$  ON THIS SIDE

|            |    |   |                |
|------------|----|---|----------------|
| DESIGN     | RF | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  | REV. A         |
| DRAWN      | RF |   |                |
| CHECKED    | RF | DRAWING NO. <b>D4694</b>  | SHEET 13 OF 13 |
| MFG. APPR. | RF | TITLE <b>CHANNEL ASSEMBLY</b>   | SCALE NTS      |
| APPROVED   | RF | DATE <b>12.07.25</b>  |                |
| DE APPR.   | RF | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD |                |